

## **AMENDMENTS TO THE SPECIFICATION**

Please replace the Abstract with the new Abstract set forth below:

A DOA estimation unit is provided with at least one of two DOA estimation techniques to determine the DOA of signals wireless transmitted. A first  
5 technique includes determination of the DOA based at least in part on a relationship between a received signal vector and a number of signal directional vectors. The second technique includes determination of the DOAs of the  $L$  multipaths of a signal by searching in a direction range centered on a determined DOA of the signal.

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Please amend page 6, lines 14-19 as follows:

For the embodiment, base station **106** includes  $N$  antennas **108a-108n**, RF unit **110**, and signal processing unit **1110**, coupled to each other as shown (RF = Radio Frequency). Antennas **108a-108n** are employed to transmit to, and  
15 receive signals from mobile handsets **102a-102j**. Additionally, antennas **108a-108n** may be employed for other purposes. Antennas **108a-108n** may also be referred to as sensors. For the purpose of this application, the two terms are synonymous.

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Please amend page 6, line 23 through page 7, line 2 as follows:

Signal processing unit **1110** is employed to process the down converted baseband signals, and process outbound signals for up conversion. For the embodiment, signal processing unit **1110**, includes in particular DOA Estimation unit **112** and Beamforming unit **114**, coupled to each other and to RF unit **110** as  
25 shown.